

**Environmental Restoration (ER) Project
Cerro Grande Fire
Accelerated Action Information Sheet**

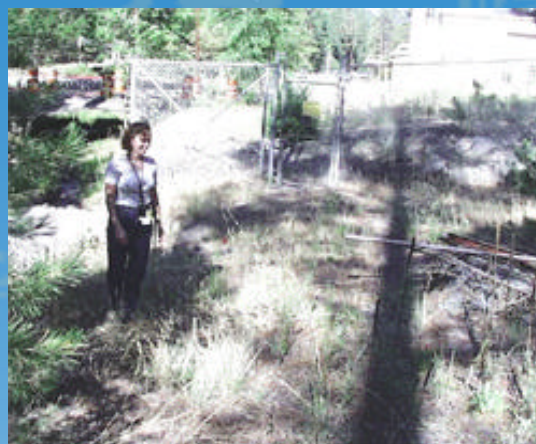
**Potential Release Site (PRS) 02-009(c)
Non-intentional Release**

Technical Area (TA)-2, located in Los Alamos Canyon, housed several reactors, including the Omega West and Water Boiler Reactors. The reactors were shutdown, removed from the nuclear facilities list, and placed into the Laboratory's Decontamination and Decommissioning program.

PRS History: PRS 02-009(c) consists of two areas of radioactive soil contamination south of former Structure 2-48 that were identified during decommissioning activities in 1986. One area is a condensate trap that included a primary pit north of Los Alamos Creek and a secondary pit south of the creek, which was used when Building 2-48 was being removed. Infiltrating groundwater and contaminated soil prevented removal of components, and groundwater was pumped to a secondary pit. As a result, cesium-137 was detected in the secondary pit during the decommissioning of Building 2-48.

Contaminated soils were removed to a depth of five feet or more. Residual cesium-137 activity remains in the soil at depth and is covered with up to seven feet of clean fill. The second area consists of a leach field that was probably associated with the septic tank at Building 2-43 that was known to be contaminated. The area was backfilled with six to nine feet of clean tuff. Field screening was conducted in 1995. Results showed no detectable concentrations of organic chemicals and no alpha activity above instrument background. Beta/gamma activity was elevated slightly above instrument background.

PRS 02-009(c) is listed on the Hazardous and Solid Waste Amendments module to the Laboratory's Hazardous Waste Facility permit. The ER Project has not proposed the site for no further action. The existing data is inadequate



because the extent of the contamination is not known

Issues of Concern: The area upstream of PRS 02-009(c) burned during the Cerro Grande fire. The intensity of upstream burn was low to moderate. Surface contamination at the site was removed during a decontamination and decommissioning action in 1986. There is potential for erosion or scouring. PRS 02-009(c) is very close to Los Alamos Creek and is suspected to be the source of strontium-90 contamination in the alluvial groundwater. There is no debris on the site that could enter the flood watercourse. There are no structures that could interfere with or be impacted by flood mitigation efforts.

Accelerated Action Status: PRS 02-009(c) was evaluated after the Cerro Grande fire. ER Project personnel completed 12 boreholes and collected 81 samples by September 2000. Following the drilling and sampling, ER Project personnel reseeded and mulched the area around the stream crossing as site restoration measures.

Related Documents:

"TA-2 Water Boiler Reactor Decommissioning (Phase I)," LANL Report LA-10890-MS, October 1986.

"Solid Waste Management Units Reports," Vol. I of IV (TA-0 through TA-9) LANL Report LA-UR-90-3400, revised November 1990.

"RFI Work Plan for Operable Unit 1098 (TA-2, 41)," LANL Report LA-UR-92-3825, June 1993

